

R E M A R K S

Applicants cancel claims 2 and 6-7. Claims 1, 3-5, and 8 remain pending in the application. Applicants amend claim 1 to incorporate features that correspond to those of claims 2 and 6 and for clarification, and amend claim 8 to independent form. No new matter has been added.

The Examiner objected to Figs. 12-17 under MPEP § 608.02(g) for failing to designate that which is old as “Prior Art.” Applicants enclose Replacement Sheets for Figs. 12-13 and 15-16 with the added caption. Applicants respectfully submit to the Examiner that Figs. 14 and 17 only illustrate Applicants’ own recognition of problems with conventional systems, and are, thus, not conceded as prior art. In view of the foregoing, Applicants request that the Examiner withdraw the objection.

Claims 1-4 and 6-7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicants’ Admitted Prior Art (“AAPA”) in view of U.S. Patent No. 5,408,469 to Opher et al.; claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Opher et al., and further in view of U.S. Patent Application Publication No. 2004/0076154 to Mizutani et al.; and claim 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Opher et al., and further in view of U.S. Patent No. 6,665,297 to Hariguchi et al. Applicants amend claim 1 to incorporate features that correspond to those of claims 2 and 6, amend claim 8 to independent form, and respectfully traverse the rejections of these claims.

The alleged AAPA includes description of a network in which transmission path ports in transmitters are connected through transmission paths such as optical fiber paths, and data communications is performed between transmitters. And Opher et al. describe a data communication network providing for a multiport router and providing for use of an

asynchronous transfer mode (ATM) switch or the like as a routing backplane or packet switching engine.

The Examiner applied the description of a judging part 173 in the background section of the specification—and illustrated in Fig. 15 of the application—as alleged AAPA disclosure of the claimed judging part recited in original claim 6, now incorporated in claim

1. The judging part 173 illustrated in Fig. 15 merely extracts, however, a number of a transmitting port section (112, 122, 132, or 142) and commands a transmitting part (174, 175, 176, or 177) connected with the extracted transmission port section. Please see page 6, line 16 to page 7, line 3 of the specification. This judging part 173, therefore, does not judge whether or not to relay a received packet by referring to a table, based on a receiving port identifier extracted by a receiving port extracting part and a source address extracted by a source address extracting part. Correspondingly, the cited portions of Opher et al. also only describe multiport routing using an ATM switch as a routing backplane.

Therefore, even assuming, arguendo, that it would have been obvious to one skilled in the art at the time the claimed invention was made to modify AAPA in view of Opher et al., such a combination would have, at most, suggested multiport routing with judging on commanding a transmitting part connected to a corresponding extracted transmission port section for a received packet.

In other words, even assuming, arguendo, that it would have been obvious to one skilled in the art at the time the claimed invention was made to modify AAPA in view of Opher et al., such a combination would still have failed to disclose or suggest,

“[a] transmitter in a network where a plurality of transmitters have an individual specific address and are connected through different transmission paths so that a packet with information about a source address is transmitted, said transmitter comprising:

a plurality of transmission path ports respectively connected to said different transmission paths for receiving said packet; and

a relay section for relaying the received packet to a relay transmission path of said transmission paths by which said received packet reaches its destination;

wherein said relay section comprises:

a table for storing information about the relay of said received packet to one of said transmission path ports connected to said relay transmission path, correlated with a port identifier of each said transmission path port and the source address of the transmitter that transmitted said packet; and

a router for extracting the port identifier of the transmission path port that received said packet and said source address contained in said received packet, and routing said received packet to the transmission path port connected to said relay transmission path by referring to said table for said extracted port identifier and source address, wherein said router comprises:

a receiving port extracting part for extracting the receiving port identifier of the transmission path port that received said packet;

a source address extracting part for extracting the source address contained in said received packet; and

a routing part for performing said routing by referring to said table in response to said receiving port identifier extracted by said receiving port extracting part and said source address extracted by said source address extracting part, wherein said routing part comprises:

a judging part for judging whether or not to relay said received packet by referring to said table, based on said receiving port identifier extracted by said receiving port extracting part and said source address extracted by said source address extracting part; and

an assigning part for assigning said received packet to a transmission path port when it is judged by said judging part that said received packet is relayed,” as recited in claim 1.

(Emphasis added)

Applicants refer the Examiner to Figs. 2-3, and their corresponding description in the specification, for exemplary embodiments of the above-cited claim features—e.g., “relayed (o)” and “not relayed (x).” Advantageously, the claimed invention provides for enhancing packet transmission efficiency, minimizing packet congestion, and improving the quality of transmission paths by improving the efficient use of redundant structure.

Accordingly, Applicant respectfully submits that claim 1, together with claims 3-4

dependent therefrom, is patentable over AAPA and Opher et al., separately and in combination, for at least the foregoing reasons. The Examiner cited and applied additional references, Mizutani et al. and Hariguchi et al., specifically to address the additional features recited in rejected claims 5 and 8, respectively. Hariguchi et al. describe a deterministic routing table that includes a set of hash circuits and a CAM. The routing table searches for the longest machine destination address stored in any of the hash circuits and the CAM, if any, and outputs an output pointer associated with that destination address within a fixed predetermined time. And Mizutani et al. describe a content relay node comprising a data processing unit for storing or transmitting a data packet on the basis of the data attribute, a storage connected to the data processing unit, transmitting units each for processing the header of a data packet in accordance with a control signal from the data processing unit and transferring the data packet to a neighboring processing unit and transferring the data packet to a neighboring relay node, and a routing control unit for selecting the transmitting unit or the data processing unit as a destination of a data packet on the basis of routing information including a storage address, wherein the storage unit stores a copy of a data packet at least until transfer of the data packet to the next node is completed.

As such, further combinations with these additional references would still have failed to cure the above-described deficiencies of AAPA and Opher et al., even assuming, arguendo, that such further combinations would have been obvious to one skilled in the art at the time the claimed invention was made. Accordingly, Applicant respectfully submits that claims 5 and 8 are patentable over the cited references for at least the above-stated reasons with respect to claim 1, from which claim 5 depends and corresponding features of which are incorporated in claim 8.

In view of the remarks set forth above, this application is in condition for allowance

which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,

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